



Trendfire ELD+

Operating Instructions & Driver Guide

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1. About This Guide

This Driver Guide is intended for use by drivers who are utilizing the Trendfire ELD+ application to meet the various federal and state requirements for hours of service tracking and reporting utilizing Electronic Logging Devices (ELD) as specified in the FMCSA ELD Rule. It provides instructions for the complete operation of the Trendfire Technologies ELD+ application, one component of Trendfire's overall telematics solution for the trucking industry. ELD+ allows users to be fully compliant with the federal Electronic Logging Device mandate for interstate trucking, and to take advantage of a wide range of additional functionality, including hours of service logging for intrastate trucking.

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d) Applies to ELD+ release versions: 2.0.9 or higher

Questions and suggestions concerning this document should be addressed to: info.us@trendfire.com

2. ELD+ Operating Requirements & Installation Information

The Trendfire ELD+ system for the recording, maintenance, data sharing, and display of hours of service (HOS) records of duty status (RODS) and other required information is a part of the overall Trendfire Technologies telematics solution for fleet management. The Trendfire Technologies basic telematics package is a prerequisite for the use of ELD+, and includes all the necessary hardware and software components for its successful operation. A description of the Trendfire Technologies Telematics solution can be found at www.trendfire.com.

2.1 System Overview

ELD+ consists of a mobile application (mobile app) that is linked via a wireless connection to a Trendfire Telematics Unit (TTU). The TTU is integrated by a direct connection into the vehicle's electronic control and monitoring systems. It is via this connection that all the data required by ELD+ is derived. The mobile app, running on an Android platform, provides the driver the ability to perform all the functions needed for the recording, maintenance (including editing and annotating) and provisioning of information as required by the FMCSA ELD mandate.



2.2 Installation

ELD+ is an integral part of the Trendfire Technologies telematics solution. Installation of the ELD+ management software is one step in the overall installation process and includes the installation of the ELD+ app on whatever mobile device(s) will be used by the driver(s). Once the ELD+ app has been enabled, it will be kept up-to-date through the Google Play Store's automatic updating facility. If for any reason Trendfire ELD+ has not been configured, it is easily added by following these simple steps:

- 1. Log on to the mobile device (phone or tablet) that is used by the driver to access the Trendfire system.
- 2. Locate the Google Play Store app, and open it
- 3. Search for "Trendfire"
- 4. When the list of Trendfire apps appears, tap on the icon for "Trendfire ELD+".
- 5. Click "Install"

ELD+ will be installed, and will now appear as an available shortcut. As with any app, you can position it on the mobile device screen as you wish.



3. Operating Instructions for Drivers

3.1 Logging In

Start by tapping the ELD+ icon on your mobile device.

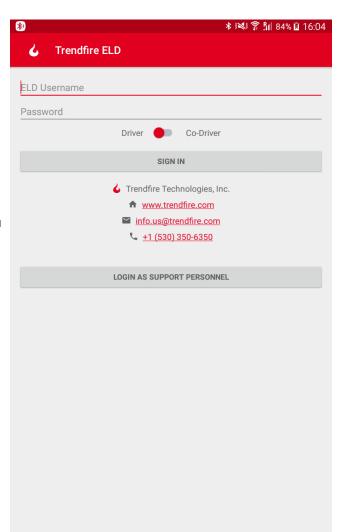


The logon screen (shown at right) will appear. Follow these steps:

- Enter the ELD+ Username and Password provided by your Trendfire system administrator.
- If you are team driving, use the toggle slider to select whether you are the driver or co-driver.
- Tap "Sign-In"

You are now logged in to the ELD+ system.

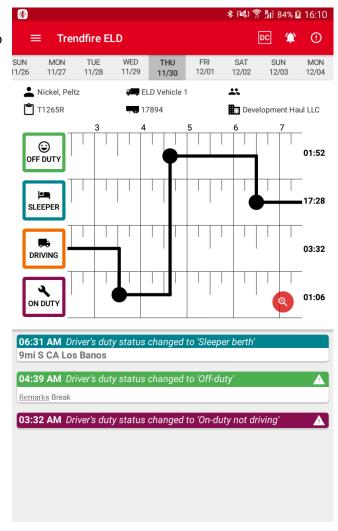
Note: The "Login as Support Personnel" option is for use by your Trendfire system administrator. You will not need to use it.





3.2 The Logs Screen

The first thing that you will see after logging in is the **Logs Screen** that is used to record and display your daily duty records and other basic log information. The Logs Screen is the primary screen with which you will interact on a daily basis.



The Logs Screen consists of:

- A Header bar that allows access to the Menu Screen as well as displaying the icons for noting special driving situations, and accessing diagnostic and malfunction events
- A Date bar that, by swiping left or right and tapping on the selected date displays your log
 information for that day
- An **Information bar** that contains your driver name, vehicle number, co-driver name (if any), the bill of lading or other job-related number (if any), trailer number(s) (if any), and the name of your registered motor carrier. Each of these items is represented by an icon which, if you tap on it, will display all required information about that item. In certain cases, you can enter and update the information (e.g., bill of lading information, trailer numbers). For other items the information can only be changed by authorized personnel.



- A **Duty Status graph** that allows you to change your duty status simply by tapping the appropriate duty status on the left side of the graph

 Note: a status change to "Driving" is made automatically when the vehicle has been on motion at 5 miles per hour.
- An **Events log** that displays your various logged activities and events, and allows you to edit and annotate these as needed.

Header Bar					
=	Opens ELD+ Functions Menu				
PC YM	Logs special driving situations: - Select Personal Conveyance (PC) if the vehicle is being driven for personal use - Select Yard Moves (YM) if using the vehicle within the yard. Permissions for use of PC and YM are set up by the Trendfire system administrator through the Trendfire portal.				
Inactive / Active Inactive / Active	Provides access to the log of diagnostic events, should any occur. Provides access to the log of system malfunctions, should any occur.				

Information				
-	Displays driver information			
4	Displays vehicle identification information			
*	Sets a Co-driver (provides search by ELD+ Username) Displays Co-driver information			



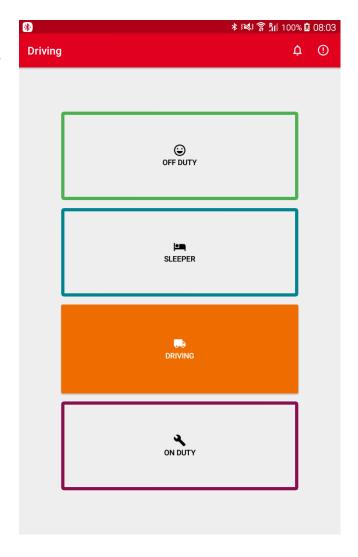
	Allows entry and display of Bill of Lading or other job-related information
1 '00'	Allows entry and display of trailer(s) information
	Displays Motor Carrier information

Event Status (shown within individual event entries)						
Φ	Indicates that event information cannot currently be uploaded to the server due to lack of a mobile connection. Synchronization will occur when a connection is established. No action is required.					
A	Indicates that required data is missing (e.g., vehicle location)					

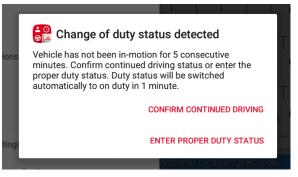


3.2.1 Change Duty Status

When you begin to drive your duty status will be automatically set to "Driving". As long as the vehicle is in motion, the only available screen is the one shown here, indicating your status. Any attempt to change status will result in your duty status being reset to "Driving".



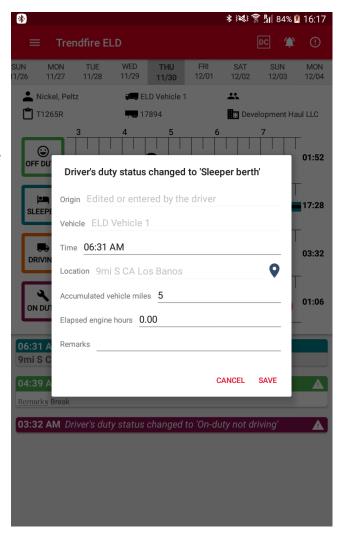
When in the Driving state, if your vehicle has not been in motion for 5 consecutive minutes you will receive the message shown here. You will have 1 minute to confirm that you are still driving, or to enter the correct duty status. If you do not respond, you will be automatically switched to On Duty/Not Driving status.





3.2.2 Modify a Duty Status Entry

Certain fields within a driver's duty status entries can be edited and annotated. To do this, do a long press on the duty status entry that you wish to edit. A pop up screen, similar to the one shown here, will appear. Items shown in dark black are able to be changed and/or added to. Items in light gray may not be changed.





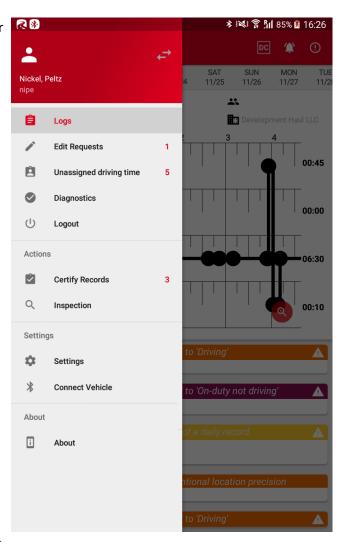
3.3 The Menu Screen

The Menu Screen allows the driver to perform a variety of important functions related to ELD+ operation and logging, including inspection reporting. It can be accessed by tapping on the Menu Icon (shown above) on the Logs screen. The Menu Screen will appear on the left side of the mobile device, overlaying the Logs Screen. At the top of the Menu screen you will see the Menu Header, displaying either a single or double person icon, with your name below. A single person icon (as in the example at right) indicates that you are signed in as the driver. A dual person icon indicates that you are signed in as a co-driver.

To the right of the user name is a **Double Arrow** icon. Tapping the double arrow icon will switch the driver and co-driver roles when team driving. Note: This functionality is disabled when the vehicle is moving.

Beneath the Menu Header is set of icons and a list of the functions corresponding to each of them. These functions are described below.

Note: The red numbers that appear next to certain functions indicate open items for that function that require action.



3.3.1 **1** The Logs Icon

Tapping the **Logs icon** will close the Menu Screen and return the user to the Logs Screen.

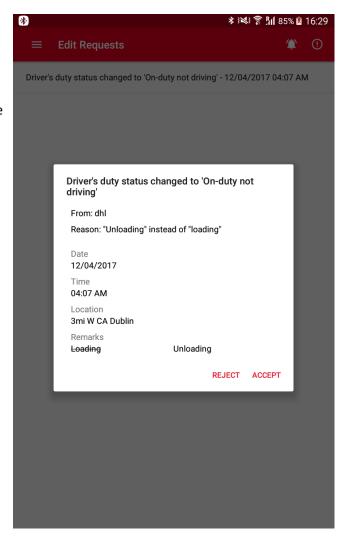


Requests for edits to certain duty status events can be made when errors or oversights occur. Your company's Trendfire system administrator can assist you with this if you have a change to make. When one or more edit requests that affect your duty status have been made, a red number will appear on the Edit Requests line, indicating the number of outstanding requests. Tapping on the Edit Requests icon will show a list of these requests for your review (see the example at right).





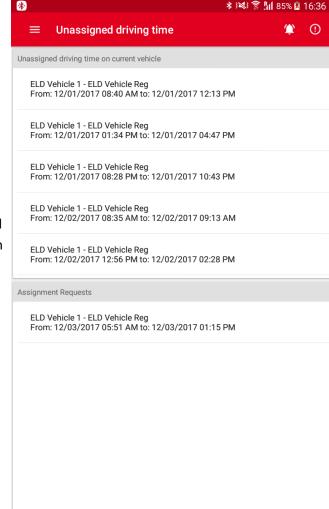
Tapping on an individual Edit Request will provide you with a pop up screen containing the detail on the request. This screen will allow you to either accept or reject the edit by selecting the appropriate response at the bottom of the detail box.





3.3.3 Land Unassigned Driving Time

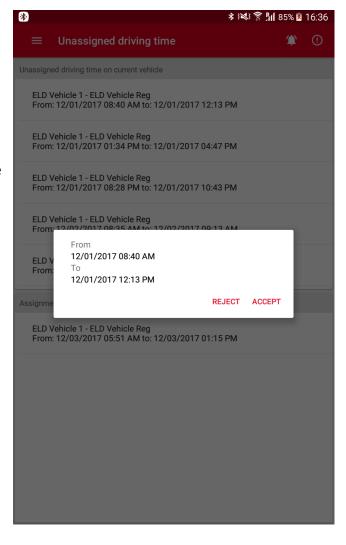
Several conditions can occur that will result in a failure to assign time that the vehicle was in motion to the appropriate driver. In the case of unassigned driving time (which, as an example, might occur if a driver fails to log in before driving) ELD+ records all the information required about the vehicle while it is being driven. This information is logged in an unassigned driving record which is then accessible by the Trendfire system administrator, as well as by any safety inspector. The information also appears, as shown at right, under the Unassigned Driving Time tab for review by the current driver immediately after logging in and establishing the link between the TTU and the driver's mobile device.





Tapping on any individual Unassigned
Driving Time entry will provide the driver
with a pop up screen containing the
window of unassigned time covered by
that specific entry. This screen will allow
you to either accept the unassigned time
as yours, or reject it, by selecting the
appropriate response at the bottom of the
detail box.

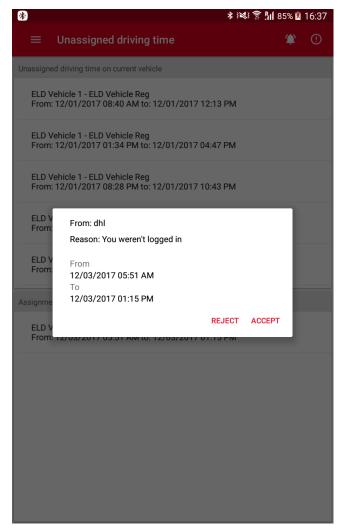
Note: If you reject an Unassigned Driving Time entry, it will continue to appear in your list until it has been accepted by another driver. As long as the time remains unassigned, it will be displayed.





Requests for clarification concerning unassigned driving time can also be made by the motor carrier's Trendfire system administrator. In this case, in addition to the window of unassigned time being reviewed, the detail pop-up will also show the source of the request ("From: requestor"), and the reason for the request. You can accept the request (assigning the driving time in the window to yourself) or reject it by tapping the appropriate choice at the bottom of the detail screen.

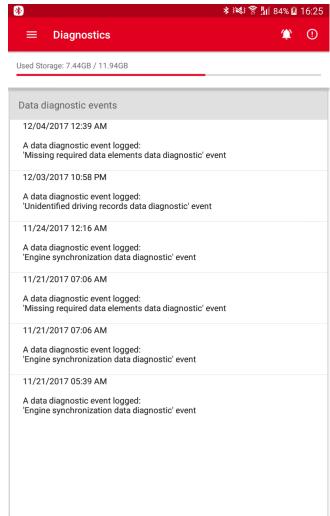
Finally, driving time event changes may be necessary if a driver and co-driver fail to switch roles when necessary. In these cases, the driving time can also be modified using a procedure similar to that outlined above. In such cases, both the driver and the co-driver must accept the change.





ELD+ continuously monitors for events that are outside the range of normal operations. Such events are rare, but if they do occur they must be logged as diagnostic events. The **Diagnostics** screen displays a list of data diagnostic events that have occurred.

Some diagnostic events are transient, while others indicate a problem that must be addressed by Trendfire support personnel. While you will normally not have to deal with these, if you see a diagnostic event indicating a malfunction that has been in the list for more than 24 hours, you should report it either to your company's Trendfire system administrator, or to info.us@trendfire.com.



3.3.5 **U** Logout

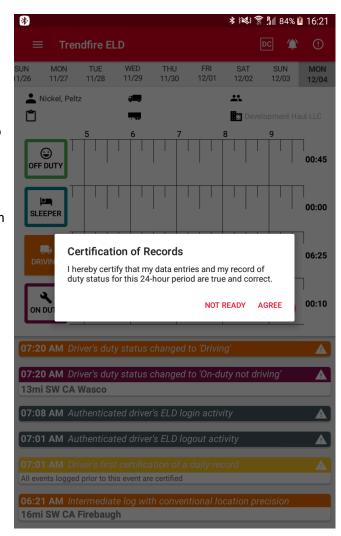
Tapping the **Logout** tab will sign the driver out from the system. The driver will be prompted to certify any open records as explained in section 3.3.6. The driver will not be logged out until all open records have been certified.



3.3.6 Certify Records

Drivers are required to certify that their records of duty status are accurate and correct. The ELD rule requires that you certify your records for the previous 24-hour (day) period. For this reason, ELD+ provides three separate options for you to certify your entries. These are:

- (a) When you first log in, or return to the app under certain conditions, if you have any duty status records that have not been certified you will see the pop-up screen shown at right. You may either delay certification by tapping NOT READY, or certify all outstanding open records by tapping AGREE.
- (b) If you see, when examining the Menu Screen, that you have uncertified records, you can tap the **Certify Records** icon. This will provide you with the opportunity to certify these open records.
- (c) Finally, when you log out of ELD+ you will be required to certify your duty status records.

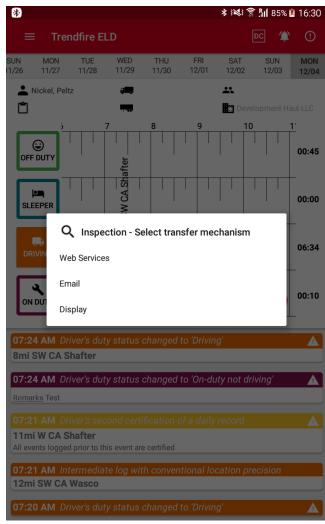




3.3.7 Q Inspection

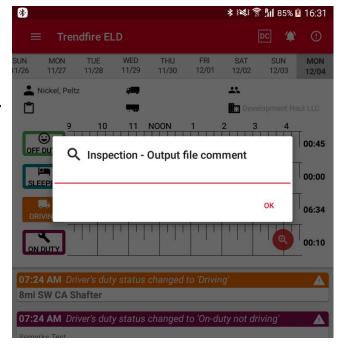
Making safety inspections as easy as possible, at least insofar as HOS information is concerned, is a key objective of Trendfire ELD+. By tapping the Inspection icon, ELD+ provides you with three methods (as required by the ELD mandate) for delivering hours of service logs and other required information to a safety inspector or law enforcement officer. Two of these, Web Services and Email, electronically transfer the required log information to an inspection and review location. The third, **Display**, results in the immediate provisioning of the driver's logs on the mobile device for inspection.

Note: The safety inspector or law enforcement officer will specify the method to be used for data transfer and inspection. The driver should simply tap the appropriate option.





Selecting either the Web Services or the Email transfer mechanisms will result in the pop-up screen shown at right. You should insert an Output file comment, provided by the safety inspection officer, into the transferred log file. After entry, simply tap OK.



After tapping "OK", the chosen transfer mechanism will transmit the required information. A verification that this transmission has been successful will appear as an overlay on the Logs screen, as shown here. In addition to verifying that the transmission succeeded, the transfer mechanism and the Output file comment will also be verified.

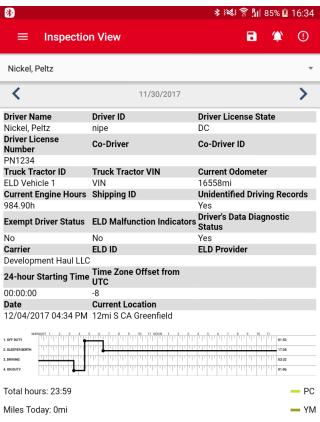




If you are required to physically show your log to the safety inspection officer, the **Display** option should be selected. This will bring up the **Inspection View** screen shown at right. Scrolling down will allow all the required log information to be viewed.

Notes:

(1) Tapping on the down arrow icon opposite the driver name will allow the inspector to examine any unassigned driving times associated with this vehicle.
(2) From the Inspection View, tapping the disc icon will export the log data to a .pdf. This file can be printed or saved offline, at your discretion.



Change of Duty Status, Intervening Interval Records and Change in
Driver's Indication of Special Driving Conditions:

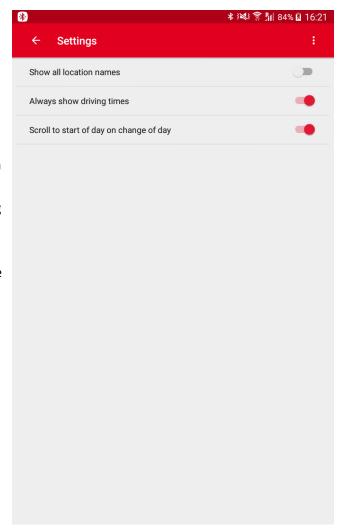
Time Location	Odometer	Engine Hours	Event	Origin	Comment
06:31 9mi S CA AM Los Banos	5mi	0.00h	Driver's duty status changed to 'Sleeper berth'	Edited or entered by the driver	
04-20			Driver's duty etatus	Edited or	



3.3.8 Settings

The Settings option is used to customize various features of the ELD+ app. The driver can:

- Choose to display or not display location names on the duty status graph
- Toggle the display of driving times on and off
- Select whether, when initially logging in or switching days, the duty status graph is positioned at the start of the day (midnight), or at the current time





3.3.9 Connect Vehicle

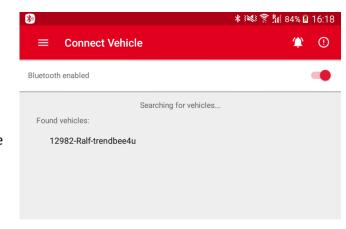
The Connect Vehicle option can be used to select and view the vehicle that the device is connected to.

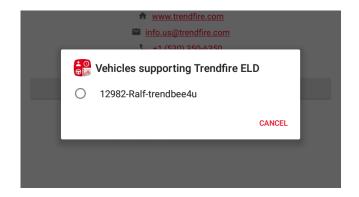
When using this option:

- Use the red toggle to ensure that the Bluetooth is enabled.
- Wait while the app searches for nearby vehicles.

The current vehicle will now be displayed on the main screen.

When the ELD+ app is running and Bluetooth is enabled, it will display Trendfire ELD+ enabled vehicles in range.

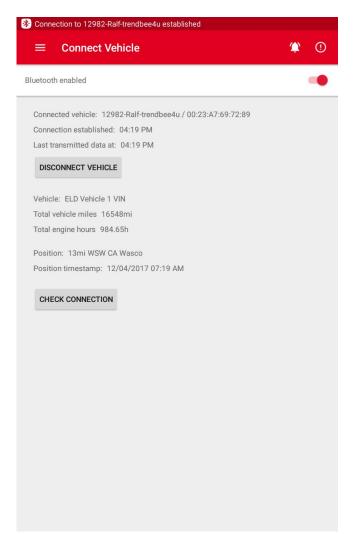






Once the connection between the vehicle and the ELD+ app is established, the Connect Vehicle option will:

- Display connection information, together with summary information on vehicle status
- Allow manual (forced)
 disconnection of the Bluetooth link
 via the Disconnect Vehicle tab
- Permit testing of the link via the Check Connection tab





3.3.10 • About

The About option provides information needed to maintain and support the ELD+ system. The driver will rarely need to access this option, and only when requested by the Trendfire system administrator to transmit diagnostic information. This is done simply by tapping "Send Diagnostic Report". The About screen can be exited by tapping OK.

